

What is claimed is:

1. A large scale storage system of viable somatic stem and/or progenitor cells suitable
5 for use in a method of treatment of a disease or a disorder of a patient, or a method
of treatment of a patient having a predisposition for a disease or disorder,
comprising:
 - a) a large number of solid supports comprising viable somatic stem and/or progenitor
cells from patients, and,
 - 10 b) preoperative information of the patients from which the cells have been taken.
2. The system according to claim 1, wherein the cryopreserved/frozen viable somatic
stem and/or progenitor cells are made through a method comprising the steps of:
 - a) isolating or obtaining (pre-natal, neonatal or post-natal) tissue from a patient
15 comprising somatic stem and/or progenitor cells,
 - b) separating the stem and/or progenitor cells from said tissue, and,
 - c) cryopreserving/freezing the cells of step b) in a solid support such that said cells
remain(s) viable.
- 20 3. A method of treatment of a disease or a disorder of a patient, or a method of treatment
of a patient having a predisposition for a disease or disorder, comprising thawing
tissue comprising somatic stem and/or progenitor cells or thawing isolated stem
and/or progenitor cells from patients obtained by means of a large scale storage
system of claim 1 or 2 and administering said stem and/or progenitor cells to said
patient.
- 25 4. The system or method according to any of claims 1 to 3, wherein said solid support is
marked by a barcode.
- 30 5. The system or method according to any of claims 1 to 4, wherein said tissue is
isolated from remote areas of the body of the patient.
6. The system or method according to any of claims 1 to 5, wherein said tissue may be
chosen from the group consisting of bone marrow, blood and fat tissue.

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7. The system or method according to claim 6, wherein said bone marrow is isolated from hip bones.
8. The system or method according to any of claims 1 to 7, wherein the patient from which the tissue is taken is an adult.
9. The system or method according to any of claims 3 to 8, wherein said cells or tissue are/is further treated using stem cell technologies.
10. The system or method according to any of claims 3 to 9, wherein said cells or tissue are/is further differentiated.
11. The system or method according to claim 10, wherein the differentiated cells/tissue are/is chosen from the group of neuronal, liver, islet and heart cells/tissue.
15. A product comprising a plurality of viable somatic stem and/or progenitor cells combined with preoperative information of the patient from which said somatic stem and/or progenitor cells have been taken.
20. 13. A product according to claim 12, wherein said somatic stem and/or progenitor cells carry a heterologous gene sequence for use in the treatment or prevention of the human disease or disorder or a predisposition thereof, said gene sequence being stably incorporated in said cells, said cells being capable of generating progeny cells which express the heterologous gene sequence.
25. 14. A method of treatment of a disease or a disorder of a patient or a method of treatment of a patient having predisposition for a disease or disorder comprising the use of a product according to claim 12 or 13 or a system according to any of claims 1 to 11, or a method according to claim 3, wherein said disease or disorder is chosen from the group consisting of:
 - a) leukemia and related cancers such as lymphoma,
 - b) damages to heart cells and heart vessels, such as those following acute myocardial infarction (heart attack), congestive heart disease, or other heart ailments for example unstable angina pectoris,
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- c) brain and spinal cord neurological damage (eg. Parkinson's disease and Alzheimer Disease),
- d) stroke, and,
- e) diabetes (develop islet cells).

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15. A method of preparing cell transplants comprising the use of a system according to any of claims 1 to 11 or a product according to claim 12 or 13.

10 16. A method of preparing bio-engineer organ parts comprising the use of a system according to any of claims 1 to 11 or a product according to claim 12 or 13.

17. A method of re-building cartilage comprising the use of a system according to any of claims 1 to 11 or a product according to claim 12 or 13.

15 18. A method of repairing tissue for cosmetic or reconstructive surgery comprising the use of a system according to any of claims 1 to 11 or a product according to claim 12 or 13.

20 19. A method of repairing skin from burns and grafts comprising the use of a system according to any of claims 1 to 11 or a product according to claim 12 or 13.

25 20. A method of preparing cells which may be used in gene therapy, for treating for instance cancers, Cystic Fibrosis, Huntington Disease, Thalassaemia, and Haemophilia comprising the use of a system according to any of claims 1 to 11 or a product according to claim 12 or 13.

21. The system, method or product according to any of claims 1 to 20, wherein said patient is treated with autologous cells.

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22. A method for the preservation of viable postnatal stem and/or progenitor cells for use in a method of treatment of a disease or a disorder of a patient, comprising the steps of:

a) isolating post-natal tissue from a patient comprising stem and/or progenitor cells,

- b) optionally, separating the stem cells and/or progenitor cells from said postnatal tissue, and,
- c) cryopreserving/freezing the tissue of step a) or the cells of step b) in a solid support such that said tissue or cells remain(s) viable.

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- 23. A method for obtaining postnatal stem and/or progenitor cells for use in a method of treatment of a disease or a disorder of a patient, comprising the steps of:
 - a) isolating postnatal tissue from a patient comprising stem and/or progenitor cells,
 - b) optionally, separating the stem and/or progenitor cells from said postnatal tissue,
 - c) cryopreserving/freezing the tissue of step a) or the cells of step b) in a solid support such that the tissue or cells remain(s) viable, and,
 - d) thawing said tissue or cells.
- 24. The method according to claim 22 or 23, wherein said solid support is marked by a barcode.
- 25. The method according to any of claims 22 to 24, wherein said postnatal tissue is isolated from remote areas of the body of the patient.
- 26. The method according to any of claims 22 to 24, wherein said postnatal tissue is isolated from the group consisting of bone marrow, blood and fat tissue.
- 27. The method according to claim 26, wherein said bone marrow is isolated from hip bones.
- 28. The method according to any of claims 22 to 27, wherein the patient from which the postnatal tissue is taken is an adult.
- 29. The method according to any of claims 23 to 28, wherein said cells or tissue are/is further treated using stem cell technologies.
- 30. The method according to any of claims 23 to 29, wherein said cells or tissue are/is further differentiated.

31. A system of preserved viable post-natal stem and/or progenitor cells for the use in a method of treatment of a disease or a disorder of a patient, comprising:
 - a) (a) solid support(s) comprising cryopreserved/frozen viable post-natal stem and/or progenitor cells from one or more patients, and,
 - b) preoperative information of the patient(s) from which the postnatal tissue(s) has/have been taken.
32. A product comprising a plurality of viable postnatal stem and/or progenitor cells obtained by a method according to any of claims 22 to 30.
33. The product according to claim 32, wherein said cells carry a heterologous gene sequence, said gene sequence being of use in the treatment or prevention of the human disease or disorder is stably incorporated in said cells, said cells being capable of generating progeny cells which express the heterologous gene sequence.
34. The method, the system or the product according to any of claims 22 to 33, wherein said disease or disorder is chosen from the group consisting of:
 - a) leukemia and related cancers such as lymphoma,
 - b) damages to heart cells and heart vessels, such as those following acute myocardial infarction (heart attack), congestive heart disease, or other heart ailments for example unstable angina pectoris,
 - c) brain and spinal cord neurological damage (eg. Parkinson's disease and Alzheimer Disease),
 - d) stroke, and,
 - e) diabetes (develop islet cells).
35. A method of preparing cell transplants comprising the use of a system or product according to any of claims 22 to 34.
36. A method of preparing bio-engineer organ parts comprising the use of a system or product according to any of claims 22 to 34.
37. A method of re-building cartilage comprising the use of a system or product according to any of claims 22 to 34.

38. A method of repairing tissue for cosmetic or reconstructive surgery comprising the use of a system or product according to any of claims 22 to 34.

5 39. A method of repairing skin from burns and grafts comprising the use of a system or product according to any of claims 22 to 34.

10 40. A method of preparing cells which may be used in gene therapy for treating for instance cancers, Cystic Fibrosis, Huntington Disease, Thalassaemia, and Haemophilia comprising the use of a system or product according to any of claims 22 to 34.

15 41. The method, system or product according to any of claims 22 to 40, wherein said patient is treated with autologous cells.

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